



UNIVERSITAT
POLITÀCNICA
DE VALÈNCIA



ESCOLA TÈCNICA
SUPERIOR
D'ARQUITECTURA



2025
MEJOR MÁSTER
Premios
Consejo
Social
UPV

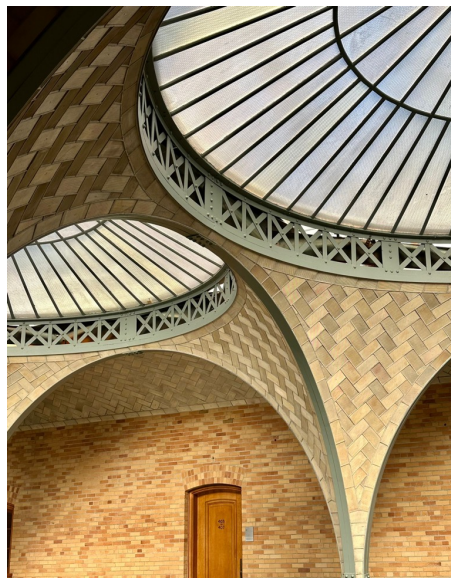
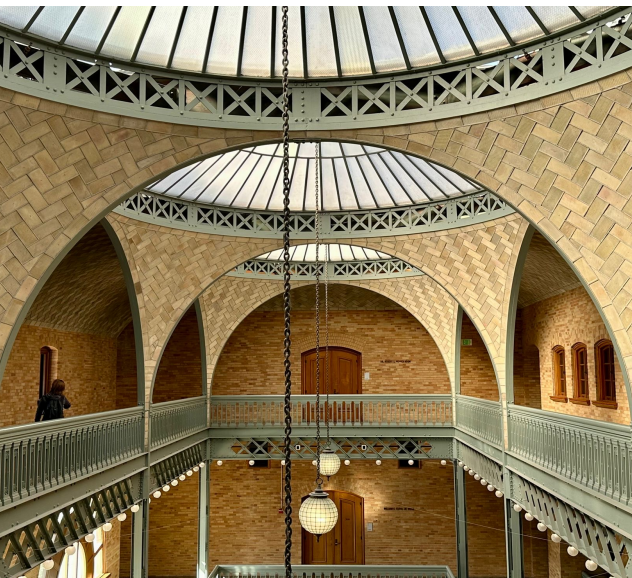
Máster Universitario en
Conservación del
Patrimonio Arquitectónico

muCPA [20]

3rd INTERNATIONAL SYMPOSIUM OF TILE VAULTS



Escuelas Pías, Valencia, Spain (author: Luis Cortés)



Hearst Memorial Mining Building, University of California, Berkeley, USA (author: Fernando Vegas)

The tile vault is a construction technique whose versatility and economy have allowed it to endure from the Middle Ages to the 21st century, when it has resurfaced thanks to its low environmental impact. This 3rd International Seminar on Tile Vaults, a continuation of those held in Valencia in 2011 and 2018, will review its evolution from its use as permanent formwork in Roman times to the contributions of Guastavino and Dieste. The latest research on their structural behaviour in the face of settlement and fire will be discussed, as well as the use of Augmented Reality for their construction. The seminar will feature 37 speakers from various countries and will offer practical workshops and visits to historical and contemporary examples, both restored and newly built.

Symposium directors:

Prof. Fernando Vegas, Prof. Camilla Mileto, Prof. Santiago Tormo Esteve

Secretary:

Prof. Lidia García-Soriano

Collaborating Organizations:

- Conselleria de Educació, Cultura, Universitats y Empleo
- Colegio Territorial de Arquitectos de Valencia
- Centro de Cooperación Internacional de la UPV
- Cátedra EMR - Estudios y Métodos de la Restauración
- Colegio Oficial de la Arquitectura Técnica de Valencia
- Centro de Investigación en Arquitectura, Patrimonio y Gestión para el Desarrollo Sostenible Pegaso
- Grupo Investigación Res-Arquitectura, Universitat Politècnica de València
- Departamento de Composición Arquitectónica
- Proyecto ReHabitat - Restauración y rehabilitación sostenible de viviendas tradicionales en contextos históricos



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COAT VALÈNCIA
Colegio Oficial de la
Arquitectura Técnica de Valencia

CTAV (Nov. 5th) / Sala de proyecciones ETSA - UPV (Nov. 6th - 7th)

November 5th, 6th, 7th and 8th 2025

Free admission until full capacity is reached



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3rd INTERNATIONAL SYMPOSIUM OF TILE VAULTS

PROGRAM

Wednesday November 5th 2025 (CTAV)

(Headquarters: Colegio Territorial de Arquitectos de Valencia. Interior courtyard of C/Hernán Cortes 6)

- 15:30 h Travel from the UPV to the Territorial College of Architects of Valencia
- 16:00 h **Welcome**
Marina Sender Contell, President of the CTAV
Ernesto Fenollosa, Director of the E.T.S. of Architecture of Valencia
- 16:10 h **Seminar presentation**
Santiago Tormo, Director of the Master's in Architectural Conservation
- 16:20 h **Seminar content**
Camilla Mileto and Fernando Vegas, professors at the UPV

BLOCK 1: Rafael Guastavino father and son

- 16:30 h **El Teatro La Massa de Guastavino**
José Luis González Moreno-Navarro, architect, professor at the UPC, Barcelona, Spain
- 17:15 h **Conservation Works at several Guastavino company vaults at NYC, USA**
Derek Trelstad, Silman & Associates, Nueva York, USA (English with AI subtitles)
- 18:00 h **In situ evaluation of Guastavino tile structures in the US: past, present and future**
Kent Diebolt, Vertical Access, USA (English with AI subtitles)
- 18:45 h **Pause**
- 19:15 h **The spiraling Guastavino staircases at the cathedral of St John The Divine**
Tim Michiels, Old Structures and Columbia University, New York City, USA (English with AI subtitles IA)
- 20:00 h **La fábrica Batlló de Guastavino: aportación a la arquitectura industrial catalana**
Ramon Graus, architect, professor at the UPC, Barcelona, Spain
- 20:30 h **Q & A session**
- 21:00 h **End of the session**

Thursday November 6th 2025 (morning)

(Headquarters: Sala de proyecciones ETSA-UPV)

BLOCK 2: History

- 09:00 h **New insights on Roman brick linings: a precedent for tile vaults?**
Paolo Vitti, professor at the University of Notre Dame, Roma, Italy – (English)
- 09:30 h **Bóvedas tabicadas aristadas en la Corona de Aragón (s. XV y XVI)**
Arturo Zaragoza, Academia de Bellas Artes de San Carlos, Valencia, Spain
- 10:00 h **La cúpula de las Escuelas Pías de Valencia en su contexto general**
Luis Cortés, professor at the UPV, Valencia, Spain
- 10:30 h **Pause**

BLOCK 3: Art Nouveau

- 11:00 h **La restauración de las bóvedas de la Finca Güell de Gaudí en Barcelona**
Camilla Mileto and Fernando Vegas, professors at the UPV, Valencia, Spain
- 11:30 h **Domènech i Montaner y las bóvedas tabicadas atirantadas**
Clàudia Sanmartí, profesor at the UPC, Barcelona, Spain
- 12:00 h **Uso y construcción de los arcos y bóvedas de la Casa Batlló de Gaudí**
Joan Olona Casas and Mireia Bosch, professors at the UPC, Barcelona
- 12:30 h **Las bóvedas cerámicas en la arquitectura de Gaudí. La Torre Bellesguard**
David García Carrera, profesor at the UPC, Barcelona, Spain
- 13:00 h **El pabellón de la Purísima del Hospital de Sant Pau de Domènech i Montaner**
Jordi Portal, professor at the UPC, Barcelona, Spain
- 13:30 h **Q & A session**
- 14:00 h **Lunch**

Thursday November 6th 2025 (afternoon)

(Headquarters: Sala de proyecciones ETSA-UPV)

BLOCK 4: Other vaults

- 15:30 h **Persian vaulting traditions: from corbel and Roman systems to tile vaults**
Mehrdad Hejazi, Professor, University of Isfahan, Irán - (English) – (online)
- 16:00 h **Bóvedas de ladrillo por hojas. Algunos casos de estudio**
José María Calvo López, professor at the UPCT, Cartagena, Spain
- 16:30 h **Exploring Bamboo and Earthen Vaults: A Case study of Nepal**
Nripal Adhikary and Pranathi, Abari - (iEnglish)
- 17:00 h **Arundo donax gridshell. Building with nature**
Luigi Alini, architect, professor at the Universidad de Catania - (English)
Sergio Pone, architect, Università Federico II, Nápoles (Italy)
- 17:30 h **Workshop on the construction and collapse of tile vaults I**
Cátedra EMR
- 18:30 h **Pause**

BLOCK 5: Geographies

- 19:00 h **Bóvedas tabicadas en el Occidente de México**
Francisco Javier de Alba Martínez, architect, professor at the ITESO, Guadalajara, México – (online)
- 19:30 h **La introducción de la bóveda tabicada en Cuba en el siglo XIX**
Óscar Mansergas, architect, Institut Català del Sòl – (online)
- 20:00 h **Tabicadas en el centro histórico de La Habana: Tradición y actualidad**
Juan Carlos Pérez Botello and Daniel Pérez Romero, La Habana, Cuba – (online)
- 20:30 h **Tile vault construction in central and southern Italy: a first overview**
Lia Romano, professor at the Università di Napoli, Italy – (English) – (online)
- 21:00 h **End of the session**



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Friday November 7th 2025

(Headquarters: Sala de proyecciones ETSA-UPV)

BLOCK 6: Old and new experiments

09:00 h Visit to the Escuelas Pías with Luis Cortés, professor at UPV, Valencia, Spain
(Places available until full capacity is reached)

11:00 h End of the visit. Transfer to the Universidad Politécnica de València (on your own)

12:00 h Vulnerable and light: research for the conservation of Neapolitan historic wooden vaults
Valentina Russo, professor at the Università di Napoli, Italy - (English)

12:30 h Optimización estructural de bóvedas tabicadas mediante diseño paramétrico y algoritmos evolutivos: un análisis de la obra de E. Dieste
Adolfo Alonso Durá and Javier Bono, professors at the UPV, Valencia, Spain

13:00 h Una aplicación contemporánea de bóvedas tabicadas de piedra de Marés
Alejandro Bernabéu, Dr. Ingeniero de Caminos, Canales y Puertos, UPM, Madrid, Spain – (online)

14:00 h Tile vaults and digital technology
Wesam Asali, professor IE Segovia, Spain – (online)

14:00 h Lunch

BLOCK 7: Workshop on the construction of tile vaults

15:30 h Workshop on the construction and collapse of tile vaults II
Manuel Fortea Luna, Vault Zafra, Zafra (Badajoz), Spain and Catedral EMR

18:00 h Pause

BLOCK 8: Structure and Construction

18:30 h Ensayos experimentales a escala real de bóvedas tabicadas de crucería sometidas a asientos diferenciales
Pedro Antonio Calderón, Civil Engineer, profesor at the UPV, Valencia, Spain

19:00 h De la tradición a la simulación: forjados históricos con viguetas de madera y revoltones tabicados bajo el microscopio del siglo XXI
Ignacio Payá Zaforteza, Civil Engineer, profesor at the UPV, Valencia, Spain

19:30 h La bóveda tabicada está viva
Manuel Fortea Luna, Vault Zafra, Zafra (Badajoz), Spain

20:00 h Conservation works at the vaults at Michigan Central Terminal, Detroit, USA
Margaret Cowie, Silman & Associates, Nueva York, USA (English)

20:45 h Q & A Session

21:00 h End of the session

Saturday November 8th 2025

BLOCK 9: Visits (Places available until full capacity is reached)

09:00 h Departure by bus to Petrés

09:30 h Visit to the Castle of Petrés

10:30 h Departure by bus to Vila-Real

11:00 h Visit to the Soriano-Manzanet Mortuary Chapel in Vila-Real

11:30 h Transfer to the Church of Sant Jaume in Vila-Real

11:40 h Visit to the Church of Sant Jaume in Vila-Real

13:00 h Departure by bus to Valencia

14:00 h Arrival in Valencia

PROGRAM

Invited professors:

- Adolfo Alonso Durá, architect, professor at the UPV, Valencia, Spain
- Alejandro Bernabéu, civil engineer, professor at the UPM, Madrid, Spain
- Arturo Zaragoza, architect, Academia de Bellas Artes de San Carlos, Valencia, Spain
- Camilla Mileto, architect, professor at the UPV, Valencia, Spain
- Clàudia Sanmartí Martínez, professor at the UPC, Barcelona, Spain
- Daniel Pérez Romero, Graduate in Heritage Management, Habana, Cuba
- David García Carrera, professor at the UPC, Barcelona, Spain
- Derek Trelstad, restoration engineer, Silman & Associates, New York City, USA
- Fernando Vegas López-Manzanares, architect, professor at the UPV, Valencia, Spain
- Francisco Javier de Alba Martínez, architect, professor at the ITESO, Guadalajara, México
- Ignacio Payá Zaforteza, civil engineer, professor at the UPV, Valencia, Spain
- Javier Bono, professor at the UPV, Valencia, Spain
- Joan Olona Casas, architect and building engineer, professor at the UPC, Barcelona, Spain
- Jordi Portal Liaño, architect, professor at the UPC, Barcelona, Spain
- José Luis González Moreno-Navarro, architect, professor at the UPC, Barcelona, Spain
- José María Calvo López, architect, professor at the UPCT, Cartagena, Spain
- Juan Carlos Pérez Botello, architect, Oficina del Historiador, Habana, Cuba
- Kent Diebolt, Vertical Access, New York City, USA
- Lia Romano, architect, professor at the Università degli Studi di Napoli Federico II, Italy
- Luigi Alini, architect, professor at the Università di Catania, Catania, Italy
- Luis Cortés Meseguer, architect, professor at the UPV, Valencia, Spain
- Manuel Fortea Luna, architect, Vault Zafra, Zafra (Badajoz), Spain
- Margaret Cowie, restoration engineer, Silman & Associates, New York City, USA
- Mehrdad Hejazi, architect, University of Isfahán, Irán
- Mireia Bosch Prat, building engineer, Universitat Politècnica de Catalunya, Spain
- Nripal Adhikari, architect, Abari, and professor at the Katmandú Univ. Katmandu, Nepal
- Óscar Mansergas, architect, Institut Català del Sòl
- Paolo Vitti, architect, professor at the University of Notre Dame, Roma, Italy
- Pedro Antonio Calderón, civil engineer, professor at the UPV, Valencia, Spain
- Pranathi, architect, Abari Foundation, Katmandú-Dhulikhel, Nepal
- Ramón Graus, architect, professor at the UPC, Barcelona, Spain
- Santiago Tormo Esteve, building engineer, professor at the UPV, Valencia, Spain
- Sergio Pone, architect, Università Federico II, Nápoles, Italy
- Tim Michiels, engineer Old Structures and professor at the Columbia Un., New York City, USA
- Valentina Russo, architect, Università degli Studi di Napoli Federico II, Italy
- Víctor Cantero Solís, art historian, UPV, Valencia, Spain
- Wesam Asali, architect, IE University, Segovia, Spain

The following visits will take place during the seminar:

- Escuelas Pías, Valencia
- Vault Reconstruction at Castle of Petrés, Petrés, Valencia
- Soriano-Manzanet Mortuary Chapel in Vila-Real, Castellón
- Church of Sant Jaume in Vila-Real from Juan José Nadal, Vila-Real, Castellón